

REMARKS

Claims 1-11 and 13-32 were pending, with claims 20-32 having been withdrawn from consideration at the time of the office action. Claims 1-11 and 13-19 were rejected. In response, claims 20-32 have been cancelled. Reconsideration and allowance are respectfully requested.

Claims 1-11 and 13-19 have been rejected under 35 USC § 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. The Examiner states that the term “said additive being CaCO_3 ” is indefinite in that the additive can be $\text{Ca}(\text{OH})_2$ in claims 15-17.

It is respectfully submitted that the Examiner has misconstrued the recitations of claims 1 and 15-17 by not reading the phrases in their entirety. Claim 1 recites, “adding at least one additive to the fiber suspension, at least one said additive being CaCO_3 ”. Thus, the recitation of claim 1 allows for the addition of more than one additive, but recites that at least one additive added is CaCO_3 . Claim 15 goes on to recite that one additive added is $\text{Ca}(\text{OH})_2$. Thus, the combination of the recitations of claims 1 and 15 includes that at least two additives are added, one additive being CaCO_3 (as required by claim 1) and the other additive being $\text{Ca}(\text{OH})_2$ (as recited in claim 15). It is respectfully submitted that the recitations in claims 1 and 15 are not in contradiction with each other, and the rejection under 35 USC § 112 should be removed.

Claims 1-11 and 13-19 have been rejected under 35 USC § 103(a) as being unpatentable over U.S. Patent 4,510,020 (Green, et al.) in view of U.S. Patent 4,055,903 (Hansen et al) or U.S. Patent 5,810,973 (Carlsmith et al) and further in view of U.S. Patent 5,731,080 (Cousin et al.).

In describing the basis for the rejection, the Examiner states that Green “teaches that the pulp should be subjected to mechanical treatment in a refiner . . . or disintegrator.” The Examiner concludes that mechanical agitation would inherently fluff the pulp. The Examiner further references Hansen et al. or Carlsmith et al as showing that disintegrators or refiners fluff pulp. Cousin, et al. has been cited for a teaching that calcium carbonate can be loaded into the pulp fibers by adding $\text{Ca}(\text{OH})_2$ into the fibers at a stock pH of 12.0.

The Examiner has equated treatment in a refiner or a disintegrator to treatment in a fluffer. Applicant respectfully submits that treatment of pulp in a refiner or in a disintegrator is vastly different than treating pulp in a fluffer, as recited in the pending claims.

A fluffer is used to break up fiber bundles and separate fibers one from another without significant alteration to the physical characteristics of the fibers or to the physical characteristics of pulp or products made from the fibers. In contrast, both refiners and disintegrators significantly change the physical characteristics of fibers processed therein.

Applicants do not recite fluffing pulp. Instead, Applicants recite treating the pulp in a fluffer. By treating the pulp in a fluffer, the effects on fiber structures that result from treating pulp in a refiner or a disintegrator are avoided. By using a fluffer in the present invention, fiber loading can be performed without changing the physical characteristics of the fiber. Fiber loading using a refiner or a disintegrator does not have a similar result. While fiber loading may occur using a refiner or a disintegrator, the physical characteristics of the individual pulp fibers, the measurable characteristics of pulp including the fibers and the physical characteristics of products made from the pulp fibers are changed. In contrast, in accordance with the present invention, by using a fluffer fiber loading can be performed without causing the same changes to the fibers, and subsequently the pulp. To equate

treatment in a refiner or a disintegrator to treatment in a fluffer ignores the different functions performed by refiners, disintegrators and fluffers; and, more importantly, the effect that each has on fiber stock processed therein. A refiner is not a fluffer. A disintegrator is not a fluffer. Each device performs differently and affects the fibers processed therein differently. The pending claims recite treating in a fluffer, which is not the same as treating in a refiner or in a disintegrator.

Attached hereto is a “DECLARATION UNDER 37 C.F.R. 1.132” from Dr. Klaus Doelle, a co-inventor of the present application, which further describes differences between the three devices known as refiners, disintegrators and fluffers, and the results that occur when each is used in a fiber loading process. It is respectfully submitted that the Declaration of Dr. Doelle clearly explains how fiber loading with a fluffer as in the present invention differs from fiber loading with a refiner or disintegrator as taught by Green et al. The present invention provides greater control over pulp characteristics in other treating steps, and is contrary to the teaching of Green et al that the intensity of mechanical treatment should be increased.

It is respectfully submitted that the Examiners arguments, which have focused on whether or not a refiner or a disintegrator fluffs pulp ignores the specific limitations of, claim 1. Claim 1 does not recite “fluffing” or that the pulp is “fluffed”. Instead, claim 1 recites “treating . . . in a fluffer”. It is respectfully submitted that whether or not a degree of “fluffing” occurs in either a disintegrator or a refiner, the action performed in a refiner or a disintegrator is vastly different from that performed in a fluffer and the Examiner’s suggestion that either a disintegrator or a refiner would inherently fluff pulp is misplaced. Treatment in either a refiner or a disintegrator impacts pulp differently than treatment in a fluffer. Thus, it

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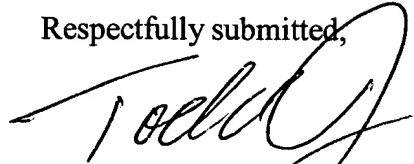
is respectfully submitted that claim 1 differs from the prior art and should be allowed. None of the prior art specifically teaches performing lumen loading by processing the pulp in a device known throughout the industry as a “fluffer”. Thus, claim 1 should be allowed together with claims 2-11 and 13-19 which depend therefrom and include all of the limitations thereof while adding further specificity to the invention recited therein.

For the foregoing reasons, Applicants submit that the pending claims are definite and do particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Moreover, Applicants submit that no combination of the cited references teaches, discloses or suggests the subject matter of the amended claims. The pending claims are therefore in condition for allowance, and Applicants respectfully request withdrawal of all rejections and allowance of the claims.

In the event Applicants have overlooked the need for an extension of time, an additional extension of time, payment of fee, or additional payment of fee, Applicants hereby conditionally petition therefor and authorizes that any charges be made to Deposit Account No. 20-0095, TAYLOR & AUST, P.C.

Should any question concerning any of the foregoing arise, the Examiner is invited to telephone the undersigned at (260) 897-3700.

Respectfully submitted,



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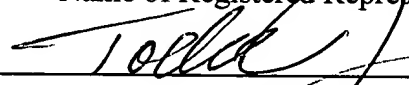
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Declaration Under 37
C.F.R. 1.132

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I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: MS Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on: January 19, 2005.

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Name of Registered Representative



Signature

January 19, 2005

Date